





Rocky Flats Environmental Technology Site P.O. Box 464 Arvada, Colorado 80007 Phone: (303) 966-2677 Fax: (303) 966-8244

96-RM-TA-0074-KH

March 29, 1996

Kyle G. Peter, Program Manager Compliance & Performance Assurance Building T130C Kaiser-Hill, L.L.C.

NOTIFICATION OF TREATABILITY STUDY OF SILVER NITRATE DESTRUCTION - GRK-093-96

Action: Transmit Courtesy Notification to Department of Energy, Rocky Flats Field Office for Transmittal to Colorado Department of Health and Environment

Rocky Mountain Remediation Services (RMRS) is providing the attached courtesy notification, intended for the Colorado Department of Public Health and Environment (CDPHE), of the intent to begin a treatability study of the destruction of silver nitrate at the Rocky Flats Environmental Technology Site.

The silver nitrate solution was generated from cleaning tools and fixtures in Building 444 silver processing operations. Initial characterizations of the solution indicate that the pH is less than 2 and that the solutions exceed the toxicity characteristic for silver. The solution is considered low-level radioactive waste due to the location where it was generated; the waste is, therefore, managed as mixed hazardous waste, having the characteristics of both a hazardous waste and a radioactive waste.

The treatability study will demonstrate a technology to recover silver metal and neutralize the resulting solution to treat the reactive characteristic. The metal recovery technology is electrochemical and the silver recovered in this step will be handled as part of DOE's inventory of precious metals. The residual solution from the electrorefining will be neutralized and transferred to the Building 374 liquid waste treatment for final treatment, if needed, and disposal.

The study will be conducted according to the requirements of 6 CCR 1007-3. The notification requirements of Section 261.4(f)(1) have been met. Because the silver nitrate study is just now beginning, we recommend that this courtesy notification be transmitted to CDPHE. Also included for your use are proposed draft letters to the Department of Energy, Rocky Flats Field Office (DOE, RFFO) and CDPHE.





GRK-093-96 March 29, 1996 Page 2

Kaiser-Hill expects to begin the study in about a month, but plans to wait until the notification has been sent to CDPHE before starting the operation. Please transmit the notification to DOE as soon as possible, at latest by mid-April. If you would like to discuss this further, please contact Kirk Ticknor, RMRS, at extension 6344 for RCRA issues or Joe Lucerna, Kaiser-Hill, at extension 7229 for project issues.

Gary R. Konwinski, Manager Performance Assurance

RMRS

KCL

Attachment:

As Stated (1)

cc:

G. M. Kelly - Kaiser-Hill
R. M. Leitner - Kaiser-Hill
J. J. Lucerna - Kaiser-Hill
K. North - Kaiser-Hill

C.C. Jierree - RMRS
K. W. Ticknor - RMRS
Correspondence Control - RMRS

File

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Attachment 96-RM-TA-0074-KH page 1 of 3

DRAFT DRAFT DRAFT

Steven Tower, Group Lead Environmental Assessment Group Rocky Flats Field Office U. S. Department of Energy

Attn: Dave Grosek

COURTESY NOTIFICATION OF TREATABILITY STUDY OF SILVER NITRATE DESTRUCTION

In this letter, Kaiser-Hill Company, L.L.C., is providing the attached notification intended for the Colorado Department of Health and Environment (CDPHE). The notification informs CDPHE of our intent to begin a treatability study of the destruction of silver nitrate at Rocky Flats Environmental Technology Site.

The silver nitrate solution was generated from cleaning tools and fixtures in Building 444 silver processing operations. Initial characterizations of the solution indicate that the pH is less than 2 and that the solutions exceed the toxicity characteristic for silver. The solution is managed as low-level radioactive waste due to the location where it was generated; the waste is, therefore, managed as mixed hazardous waste, having the characteristics of both a hazardous waste and a radioactive waste.

The treatability study will demonstrate a technology to recover silver metal and neutralize the resulting solution to treat the reactive characteristic. The metal recovery technology is electrochemical and the silver recovered in this step will be handled as part of DOE's inventory of precious metals. The residual solution from the electrorefining will be neutralized and transferred to the Building 374 liquid waste treatment for final treatment, if needed, and disposal.

The study will be conducted according to the requirements of 6 CCR 1007-3. The notification requirements of Section 261.4(f)(1) have been met. Because the silver nitrate study is just now beginning, we recommend that this courtesy notification be transmitted to CDPHE. Also included for your use is a proposed draft letter to CDPHE.

Kaiser-Hill expects to begin the study in about a month, but plans to wait until the notification has been sent to CDPHE before starting the operation. To support the Site's schedule goals, please transmit the notification to CDPHE as soon as possible, at latest by the end of April. If you would like to discuss this further, please contact Kirk Ticknor, RMRS, at extension 6344 for RCRA issues or Joe Lucerna, Kaiser-Hill, at extension 7229 for project issues.

Randy M. Leitner, Program Manager Compliance & Performance Assurance

cc:

G. M. Kelly - Kaiser-Hill
J. J. Lucerna - Kaiser-Hill
K. North - Kaiser-Hill
C.C. Jierree - RMRS

C.C. Jierree - RMRS
K. W. Ticknor - RMRS
Correspondence Control - RMRS

Attachment 96-RM-TA-0074-KH page 3 of 3

DRAFT DRAFT DRAFT

Mr. Joe Schieffelin, Unit Leader Colorado Department of Public Health and Environment 4300 Cherry Creek Drive South Denver, Colorado 80222-1530

Dear Mr. Schieffelin:

The United States Department of Energy, Rocky Flats Field Office (DOE, RFFO) submits the attached courtesy notification to the Colorado Department of Health and Environment (CDPHE) of the intent to begin a treatability study of the destruction of silver nitrate at the Rocky Flats Environmental Technology Site. The study will begin shortly after the date on this letter.

The silver nitrate solution was generated from cleaning tools and fixtures in Building 444 silver processing operations. Initial characterizations of the solution indicate that the pH is less than 2 and that the solutions exceed the toxicity characteristic for silver. The solution is also managed as low-level radioactive waste due to the location where it was generated; the waste is, therefore, managed as mixed hazardous waste, having the characteristics of both a hazardous waste and a radioactive waste.

The treatability study will demonstrate a technology to recover silver metal and neutralize the resulting solution to treat the reactive characteristic. The metal recovery technology is electrochemical and the silver recovered in this step will be handled as part of DOE's inventory of precious metals. The residual solution from the electrorefining will be neutralized and transferred to the Building 374 liquid waste treatment for final treatment, if needed, and disposal.

The study will be conducted according to the requirements of 6 CCR 1007-3. The notification requirements of Section 261.4(f)(1) have been met. Because the silver nitrate study is just now beginning, we are providing this courtesy notification.

If you would like to discuss the study further, please contact Dave Maxwell, DOE, RFFO, on 966-4017 or Joe Lucerna, of Kaiser-Hill Company L.L.C., on 966-7229.

cc:

G. M. Kelly - Kaiser-Hill
J. J. Lucerna - Kaiser-Hill
K. North - Kaiser-Hill
K. W. Peter - Kaiser-Hill
C.C. Jierree - RMRS
K. W. Ticknor - RMRS
Correspondence Control - RMRS